

SPINOV, R.I., inzhener; KAMINSKIY, N.A., inzhener; DMITRIYEVA, N.A.,
inzhener; PASECHNIK, M.S., kandidat tekhnicheskikh nauk.

Processing of sweet waters. Masl.-zhir.prom. 23 no.1:36 '97.
(MLRA 10:1)

1. Zaporozhskiy Masloboyno-zhirovoy kombinat (for Spinev, Kaninskiy
and Dmitriyeva). 2.Zaporozhskiy institut sel'skokhozyaystvennogo
mashinostroyeniya (for Pasechnik)
(Glycerol)

Processing of fats and oils. R. I. Olin, N. A. Kaviratne, N. A. Kaviratne, and H. S. Paschenko. *Mashinostroyeniye*, No. 12, p. 24. No. 11-06-11(1971). High-pressure steam methods of hydrogenation of fat without the use of catalyst produce glycerol butter with fatty-acid (II) content up to 0.3% in the form of stable emulsion. Removal of II with water entails the need for supplementary equipment for neutralization, besides a loss of glycerol and lowering of its quality. The substitution of a fat/water ratio in the hydrolyzer of 4:0.8 for the conventional 4:1 permits 20.1% correction and production of glycerol with a 19% content, in comparison to 15% with the conventional ratio. Consequently glycerol waters with 0.3% or more of fatty acids are evapd. to 30% glycerol content and left for 10 to 12 hours to cool, after which the fatty acids are eliminated via the filter. The product is filtered at 30° to the usual way and then put into storage.

H. L. Olin

25(1)

SIW/21-57-1-13/26

AUTHORS: Pasechnik, M. S. and Kaminskiy, N. A.

TITLE: An investigation of the Effect of the composition of Technological Lubricants on the Spreading coefficient in Cold Rolling of Thin Sheet Steel. (Issledovaniye vliyaniya sostava tekhnologicheskoy smazki na koeffitsiyent vytrazhivaniya tonkolistovoy stali na koeffitsiyent vytrazhivaniya)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koj SSR, 1959, Nr. 1, p 49-51 (USSR)

ABSTRACT: The purpose of this investigation was to find a home-produced replacement for palm oil, which was up to now used as a lubricant in the cold rolling of sheet steel. As the result of experiments with various vegetable oils and animal fats, the following conclusion was made: the best lubricant must be of triglyceride composition, and must contain an optimum quantity of saturated high molecular fatty acids, a

Card 1/2

SCV/21-50-1-1/2c

An Investigation of the Effect of the Composition of Technological Lubricants on the Spreading Coefficient in Cold Rolling of Thin Sheet Steel.

maximum of trisaturated glycerides, a minimum of highly-unsaturated fatty acids, and as little as possible glycerides of low-molecular fatty acids. The lubricants were finally made up on the basis of triolein dissolved in a mineral oil ("braystok", spindle oil, castor oil, etc.) both giving a lower spreading coefficient than the quick solidifying lubricants, but being better than palm oil. One of the two new greases is the "PKS-1" grade, produced at the Zaporiz'kyy maslozhirkombinat (Zaporozh'ye Oil and Fat Combine), sei since 1957 by the thin-sheet rolling mill shop of the "Zaporizhstal" plant, where it has fully replaced palm oil. There are 2 graphs and 2 Soviet references.

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet (the Dnepropetrovsk State University)

PRESENTED: July 31, 1958, by Chekmarev, A.I., Member of Ukr. Akad.

Card 2/2

PASECHNIK, M.S.

SPINOV, R.I., inzhener.; KAMINSKIY, N.A., inzhener.; PASECHNIK, M.S., kandidat
tekhnicheskikh nauk.

Increase the functions and responsibilities of plant laboratories
in industry. Masl.-zhir. prom. 23 no.5:25-26 '57. (MLRA 10:5)

1. Zaporozhskiy maslozhirkombinat (for Spinov and Kaminskiy). 2. Za-
porozhskiy institut sel'skokhozyaystvennogo mashinostroyeniya (for
Pasechnik).
(oils and fats--Analysis)

KAMINSKIY, N.A., inzh.; PASECHNIK, M.S., kand. tekhn. nauk

Use of hydrogenated fats for the preparation of specialized
lubricants. Masl.-zhir. prom. 24 no. 8:42-44 '58. (MIRA 11:8)

1. Zaporozhskiy maslozhirovoy kombinat (for Kaminskiy). 2. Dnepro-
petrovskiy universitet (for Pasechnik)
(Rolling(Metalwork)
(Lubrication and lubricants)

PAGECHIK, M. S.

"Comparative Study of the Oxidation of Stearic Acid, Octadecyl Alcohol, and Toluene by Oxygen in the Air." Sov. Tech. Sci., Khar'kov Pol. Institute Inst. imeni V. I. Lenina, Min. of her Education U.S.S.R., Khar'kov 1954. (ML, No. 1, Jan 55)

Survey of Scientific and Technical Information Received at Kochi University
Educational Institutions (1)
SC: Sum. No. 528, 22 Jul 55

PASECHNIK, Marat Stepanovich, kand. tekhn. nauk; KOVALEV, P.M., red.;
FOMICHEV, A.G., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Development of highly efficient technological lubricants for the
cold rolling of thin sheets and strips] Razrabotka vysokoeffektivnykh
tekhnologicheskikh smazok dlia kholodnoi prokatki tonkikh listov i
lent. Leningrad, 1961. 19 p. (Leningradskii Dom nauchno-tehnicheskoj
propagandy. Obmen peredovym opyтом. Seriia: Goriachais i kholod-
naya obrabotka metallov davleniem, no.6) (MIRA 14:10)
(Metalworking lubricants) (Rolling (Metalwork))

SAPKO, A.I.; PASECHNIK, M.S.

Packing of arc furnace electrodes. Metallurg. 1C no. 9;19-20 S '65.
'MIRA 18;9)

1. Dnepropetrovskiy metallurgicheskiy institut.

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CA [REDACTED]
PAZTECHNIK, M.V.

Internal conversion of the γ -radiation of radium C. I
Spectrum of positrons. V. V. Gel, G. D. Latyshev, M.
V. Pasechnik, and E. V. Talvik (Acad. Sci. U.S.S.R.)
Izv. Akad. Nauk S.S.R., Ser. Fiz. 12, 724 (1947)
The magnetic spectrograph, its magnetic field, the measurement of the field by a ballistic method, the diaphragms and the coincidence counters are described.
Seventy lines have been identified in the region 1270-
2450 e.kv, of which 18 are between 2100 and 2432 e.kv.
Some lines have been observed in the β^+ spectrum which
have not been found in the conversion spectrum of K
electrons. Particularities of the lines are discussed. II
Determination of the multipolarity of lines. V. V. Gel,
G. D. Latyshev, and M. N. Rurish (Acad. Sci. U.S.S.R.)
Ibid. 729, 3. - It is shown from the measured ratio of the
tot. coeff. of conversion with pair formation, α_K , or of
conversion in the K shell, compared to theoretically calcd. curves, that lines 1760 and 2108 are either quadrupole
or have still higher polarity. III. Ratio of the co-
efficient of conversion of the γ -radiation to forbidden
transitions. V. V. Gel, G. D. Latyshev, and S. I. Zyrkin
Ibid. 731. The ratio α_K for line 1114 e.kv. is $1.0 \times$
 $10^{-1.2} \pm 0.1$. S. Pakson

PASECHNIK, M. V.

USSR/Nuclear Physics - Gamma Spectrum
Nuclear Physics - Radium

Nov 48

"Fine Structure of the Gamma Lines of RaC," V. V. Gey, G. D. Latyshev, M. V.
Pasechnik, Leningrad Physics Tech Inst, Acad Sci USSR, 4 pp

"Dokl Ak Nauk SSSR" Vol LXIII, No 3

To study complex structure of basic lines of the gamma spectrum of RaC, measured
internal conversion lines of K-electrons for lines 1,414, 1,760, and 2,198 keV.
Explained fine structure of gamma lines as a rotatory structure superimposed on
basic lines connected with changes in the internal state of nuclei. Submitted
by Acad A. F. Ioffe 5 Oct 48.

PA 55/49T74

PASECHNIK, M. V.

USSR/Physics - Spectrograph, Magnetic
Nuclear Physics - Conversion electrons

Jul/Aug 49

"Resolving Capacity of the Magnetic Spectrograph," J. D. Latyshev, V. A. Malev, M. V. Pasechnik, Leningrad Physicotech Inst, Acad Sci USSR, 7 pp

"Iz Ak Nauk SSSR, Ser Fiz" Vol XIII, No 4

Analysis of experimental data shows that in resolution of two lines (peaks of conversion electrons) lying close together the basic role is played not by the average width of the lines (peaks), according to the usual formula for resolving capacity of a magnetic spectrograph, but by steepness of the right boundary of the lines (peaks). For the case of great steepness of the right boundary of the lines (peaks), the main role in measurements is played by the accuracy of measurements of the magnetic field and its stability. It is necessary to make the right boundary of the lines as steep as possible during operation of the magnetic spectrograph. Graphs show experimental form of line of definite energy E , with x-axis expressing electron energy and y-axis, number of electrons; resolution averages 9 keV. Submitted to Jan 49.

PA 152T 4

PASECHNIK, M. V.; LATYSHEV, G. D.; and GEY, V. V.

"Fine Structure of Gamma-Lines of Radium," Leningrad Polytech. Inst., Guide Russian
Scientific Periodical Lit., Brookhaven Natl. Lab., 3, pp 33-6, 1950 (English translation).
See C.A. 43,4565b.

PASECHNIK, M.V.

[Inelastic scattering of fast neutrons by atomic nuclei]
Neuprugoe rasseyanie bystrykh neutronov atomnymi iadrami.
Moskva, 1955. 14 p. (MIRA 14:7)

1. Laboratoriya yadernoy fiziki Instituta fiziki AN USSR.
(Atomic nuclei) (Neutrons—Scattering)

PASECHNIK, M.V.

Developments in physics in the Ukrainian Soviet Socialist Republic under the soviet rule. Trudy Inst.fiz.AN UkrSSR no.6:3-19 '55.
(MLRA 9:8)

(Ukraine--Physics)

D'YACHENKO, V.Ye. [deceased]; PASECHNIK, M.V.

Electron focusing in nonhomogeneous magnetic fields. Part 1.
Trudy Inst.fiz. AN URSS no.6:83-96 '55. (MLRA 9:8)
(Magnetic fields) (Electron beams)

D'YACHENKO, V.Ye. [deceased]; PASECHNIK, M.V.

Electron focusing in nonhomogeneous magnetic fields. Part 2.
Trudy Inst.fiz.AN URSR no.6:97-101 '55. (MLRA 9:8)
(Magnetic fields) (Electron beams)

PASECHNIK, M.V.

OMEL'YANOVSKIY, M.E., otvetstvennyy redaktor; SINEL'NIKOV, K.D., redaktor;
LIFSHITS, I.M., redaktor; OSTRYANIN, D.P., doktor filosofskikh nauk,
redaktor; PASECHNIK, M.V., kandidat fiziko-matematicheskikh nauk,
redaktor; SHUGAYLIK, A.V., kandidat filosofskikh nauk, redaktor;
AGUF, M.A., redaktor izdatel'stva; SIVACHENKO, Ye.K., tekhnicheskiy
redaktor

[Philosophical problems in modern physics] Filosofskie voprosy
sovremennoi fiziki. Kiev, 1956. 250 p. (MLR 10:1)

1. Akademiya nauk URSR, Kiyev. 2. Deystvitel'nyy chlen AN USSR
(for Omel'yanovskiy, Sinel'nikov) 3. Chlen-korrespondent AN USSR
(for Lifshits)
(Physics--Philosophy)

PASECHNIK, M.V.

1472. RESOLVING POWER OF SCINTILLATION SPECTROMETERS. I.P. Berezin, E.M. Gorkin, M.V. Pasechnik and N.N. Puchkov.

Izv. Akad. Nauk SSSR, Ser. fiz., Vol. 19, No. 3, 382-4 (1955). In Russian. English translation in: Atomic Energy Rev. Establ.

(Harwell) Transl. No. 656, 3 pp. (1960).

The energy resolution of a scintillating counter is studied using two light pulse sources, one a NaI(Tl) phosphor crystal excited by mono-energetic β -rays and the other a tungsten lamp source pulses modulated by a Kerr cell system. Results confirm the well-known limits to counter resolution, viz. phosphor and photocathode efficiencies.

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1-RCM
1-JWM

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S.E. Grapick

Inst. Physics Acad Sci
Ukr SSR

PAZ only

KMS

PASECHNIK, M.V.

Conference of the Academy of Sciences of the U.S.S.R. on the
peaceful uses of atomic energy. Atom.energ. no.2:92-93 '56.
(MIRIA 12:2)
(Atomic energy)

PASECHNIK, M. V.

WITH GOFMAN, Yu. V., "Fast Neutron Capture Cross Sections in the Region of 'Magic' Nuclei,"

with BARCHUK, I. P., and TSYBUL'EC, Yu. A. "Determination of Nuclear Energy Levels from Inelastic Scattering of Fast Neutrons,"

with KOVTUN, V. A., and UCHEMOV, S. S., "Elastic scattering of neutrons by Al²⁷, Cu²⁹, Bi²⁰⁹ Nuclei,"

Inst. of Physics, Acad. sci. Ukr. SSR

paper submitted at the K-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-22 Nov 57.

PASECHNIK, M. V.

"Cross-Sections of Fast Neutron Capture by Magic and Near-Magic Nuclei."
paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13 Sep 58.

PASECHNIK, M. V., PUCHEROV, N. N., AND TOTSKY, I. A. (Moscow USSR)

"Les Sections Efficaces des Diffusion des Nucleons et le Modele Optique du Noyau,"

report presented at the Intl. Congress for Nuclear Interactions (Low Energy) and Nuclear Structure (Intl. Union Pure and Applied Physics). Paris, 7-12 July 1958.

PASECHNIK, M.V., doktor fiz.-mat.nauk, otv.red.; VAL'TER, A.K., akademik, red.; NEMETS, O.P., kand.fiz.-mat.nauk, red.; REMENNIK, T.K., red.izd-va; RAKHLINA, N.P., tekhn.red.

[Transactions of a session of the Academy of Sciences of the Ukraine on the peaceful uses of atomic energy] "rudy sessii Akademii nauk USSR po mirnomu ispol'zovaniyu atomnoi energii. Kiev, 1958. 188 p. (MIRA 12:4)

1. Akademiya nauk USSR, Kiyev. Sessiya po mirnomu ispol'zovaniyu atomnoy energii. 2. Akademiya nauk USSR (for Val'ter).
(Atomic energy)

8362E

S/058/60/000/A001/000000
A005/A001*26.2244*

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 5, p. 31, # 1.

AUTHORS: Nemets, O.F., Pasechnik, M.V.TITLE: A Neutron Spectrometer in the Energy Range of 0.7-3 MevPERIODICAL: Tr. Sessii AN UkrSSR po mirn. ispol'zovaniyu atomnoj energii. Kishinev.
AN UkrSSR, 1958, pp. 84-93

TEXT: The authors describe a fast neutron spectrometer (0.7-3 Mev), designed according to the principle of recording the recoil nuclei at elastic neutron scattering. A spherical ionization chamber with 7.5 cm diameter was used as detector, which operates on the basis of electron collecting. The chamber is filled up with a mixture of hydrogen (1 atm) and argon (3.75 atm). The dimensions of the chamber, the gas pressure, the stopping power of the gases filling up, and the voltage fed to the chamber were chosen according to the condition of minimum pulse amplitude straggling. The pulses from the chamber were fed to a linear amplifier consisting of two units: the preamplifier and the main amplifier; the latter yields at the output pulses of amplitudes up to 100 v. The signal from the amplifier is fed to a 50-channel amplitude analyzer.

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S/35840/020/13/1/02
A005/A001

A Neutron Spectrometer in the Energy Range of 0.7-3 Mev

which operates on the principle of the amplitude-time transformation. The block-diagram of the unit is presented and the main operation characteristics of the analyzer are considered. The linearity of the amplifier characteristic and the operation stability of the analyzer were checked by means of beta an alpha-ray produced pulse generator and the pulses from uranium α -particles. The neutron spectrum from the D (d,n) He³ reaction is presented. The resolving power of the spectrometer amounts to 130 kev in the neutron energy range from 0.7 to 3 Mev.

S.M. Zaitsev et al.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

BARCHUK, I.F.: PASICHNIK, M.V. [Pasichnyk, M.V.]; TSYBUL'KO, Yu.A.
[TSybulyko, Yu.A.]

Gamma spectra due to inelastic scattering of neutrons [In
Ukrainian with summary in English]. Ukr.fiz.zhur. 3 no.1:
53-63 Ja-F '58.

(MIRA 11:4)

1. Institut fiziki AN URSR.
(Neutrons--Scattering)
(Scintillation spectrometry)

VERTEBNYY, V.P. [Vertebnyi, V.P.]; VIASOV, M.F.; PASECHNIK, M.V. [Pasichnyk, M.V.]; TOTSKIY, I.A. [Tots'kyi, I.A.]

Spherical electron-pulse ionization chambers for the study of fast neutrons [in Ukrainian with summary in English]. Ukr. fiz. zhur. 3 no.2:196-203 Mr-Ap '58. (MIRA 11:6)
(Neutrons) (Ionization chambers)

1972-411 8,221

AUTHORS: Berchel, I. F., Pasechnik, N. V., Tsybul'ko, Yu. A. 89-2-3/31

TITLE: The γ -Ray Spectra Produced by Inelastic Fast Neutron Scattering in Li, Al, Fe, Cu, Sn and Sb (Spektry γ -luchey, vozbuzhdayemykh pri ne= prugom rasseyaniyu bystrykh reytronov yadrami magniya, alyuminija, zheleza, mudi, olova i sverbiy).

PERIODICAL: Atmaya Energiya, 1970, v. 14, no. 2, pp. 132-137 (USSR).

ABSTRACT: The fast neutrons were generated by the D (d, n) ^{3}He reaction. The intensity of the source amounted to about 200 - 300 μC radon-curie or equivalent. The scattering body was shaped like a ring, which concentrically surrounded a well shielded Na I (Tl) crystal. The crystal represented the detector of a γ scintillation spectrometer. The following lines were obtained with an energy of the neutrons $E_n = 2,7$ MeV:

Element	E_γ (keV)	relative intensity	Element	E_γ (MeV)	relative intensity
Li	$0,27 \pm 0,05$ $1,41 \pm 0,02$	0,3 1,0	Al	$0,84 \pm 0,02$ $1,00 \pm 0,02$	0,4 1,0

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(b) (6)

PAGE 1 BOOK INFORMATION

REV/200

International Conference on the Human Uses of Atomic Energy, 2d. Session, 1958
Proceedings (Volume 1) Geneva, Switzerland, 1959. 152 p. (Series of United Nations
Atomic Energy Series) (See also, Annex 152)

Mr. John Paul J. A. Allibone, Ambassador, U.S. Delegation, International Conference on
Atomic Energy and H.P. Gurney, Chairman, Commission on Physical and Mathematical
Sciences, I.A.E.A., moderates the discussion. The discussion is divided into two parts:
Part I, "Current Status of Research in Physics," and Part II, "Prospects for
Promotion of Research in Physics." The discussion is concerned with the following topics:
1. Current Status of Nuclear Physics
2. Prospects for Future Research in Nuclear Physics
3. Current Status of High Energy Physics
4. Prospects for Future Research in High Energy Physics
5. Current Status of Solid State Physics
6. Prospects for Future Research in Solid State Physics
7. Current Status of Nuclear Chemistry and Related Sciences, including
the discussion by Dr. D. R. Stueckelberg, Director, Swiss Institute of Technology, Zurich,
on "Nucleus Structure," and by Dr. W. Arribalzaga, Professor of Physics, University of
Santander, Santander, Spain, on "Nuclear Reactions." The results of the discussion
are summarized in the following sections:

Part I, "Current Status of Research in Physics," contains 17 papers dealing with
various aspects of nuclear physics, including problems of particle detection, detection
of antiprotons, and the properties of nuclei. Part II, "Prospects for Future Research in
Physics," contains 10 papers dealing with the prospects of future research in
various fields of nuclear physics. The first 6 volumes contain all the
papers presented by various institutions as follows: Volume (1), Institute
(Institut für Theoretische Physik), University of Regensburg; Volume (2), Institute
(Institut für Theoretische Physik), University of Erlangen-Nürnberg; Volume (3), Institute
(Institut für Theoretische Physik), University of Bonn; Institute (Institut für
Theoretische Physik), University of Münster; Institute (Institut für Theoretische
Physik), University of Tübingen; Institute (Institut für Theoretische Physik), University
of Karlsruhe; Institute (Institut für Theoretische Physik), University of Heidelberg;
and Institute (Institut für Theoretische Physik), University (Universität) of
Aachen and Westfälische Wilhelms-Universität, Münster. The other 10 volumes consist of selected papers
presented at the Conference by various institutions. In this group, there are
two volumes which are identical, namely, "Current Status of Nuclear Chemistry and Related
Sciences" and "Prospects for Future Research in Nuclear Chemistry and Related Sciences."
The 11 volumes of "Report 2000" and 100 are referred to as
"Report 2000."

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Introduction, Dr. J. P. Allibone, Dr. V. Gurney, Dr. S. Gurney, A. H. Kastler, Dr. J. D. Roberts, Dr. C. C. Morrison, Dr. G. D. Colgate, and Dr. J. H. Dabbs, Jr.	Part I
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PASECHEIK, M.V. [Pasichnyk, M.V.]; OFENGENDEN, R.G. [Ofenhenden, R.H.];
KONENKO, L.D.

AIMA-2 pulse-height analyzer [with summary in English]. Ukr. fiz.
zhur. 4 no.1:57-71 Ja-F '59. (MIRA 12:6)

1. Institut fiziki AN USSR.
(Radioactivity--Measurement) (Electronic instruments)

PASECHNIK, M.V. [Pasichnyk, M.V.]

New problems of low-energy nuclear physics. Ukr. fiz. zhur. 4
no.1:129-132 Ja-P '59. (MIRA 12:6)
(Nuclear physics)

PASECHNIK, M.V. [Pasichnyk, M.V.]

V.I.Lenin and modern physics (on the 50th anniversary of the publication of V.I.Lenin's "Materialism and empiriocriticism"). Ukr.fiz.zhur. 4 no.4:415-427 Jl-Ag '59. (MIRA 1310)

1. Institut fiziki AN USSR.
(Physics--Philosophy) (Lenin, Vladimir Il'ich, 1870-1924)

PASECHNIK, M.V. [Pasichnyk, M.V.]; LUBCHENKO, A.F.; MENTKOVSKIY, Yu.L.
[Mentkovs'kyi, Iu.L.]

Ninth International Conference on High energy Physics. Ukr.
fiz.zhur. 4 no.6:816-830 N-D '59. (MIRA 14:10)
(Nuclear physics--Congresses)

VAL'TER, A.K.; ZALYUBOVSKIY, I.I.; KLYUCHAREV, A.P. [Kliuchariev, O.P.];
PASECHNIK, M.V. [Pasichnyk, M.V.], PUCHEROV, N.N. [Pucherov, M.M.]
CPIRKO, V.I.

Elastic scattering of 6.8 MeV protons on isotopes of chromium,
nickel and copper. Ukr. fiz. zhur. 5 no.2:270-272 Mr-Apr '60.
(MIRA 13:12)

1. Institut fiziki AN USSR i Fiziko-tehnicheskiy institut AN USSR.
(Protons--Scattering)

S/048/60/024/007/006/011
B019/B060

AUTHORS: Pasechnik, M. V., Pucherov, N. N., Chirko, V. I.

TITLE: Angular Distribution of Protons in the Inelastically
Scattered by Chromium and Nickel Isotopes

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 7, pp. 874-876

TEXT: This is the reproduction of a lecture delivered at the 10th All-Union Conference on Nuclear Spectroscopy held in Moscow from January 19 to 27, 1960. Investigations of the inelastic scattering of 6.8-Mev protons on chromium and nickel isotopes were conducted with the cyclotron belonging to the institute mentioned under Association. The target was placed in the center of the reaction chamber at an angle of 45° to the incident beam. The proton scattering was measured with a scintillation counter. The method applied has already been described in a previous paper (Ref. 1). Proton groups belonging to the first excited nuclear states of the Cr⁵² and Ni⁵⁸ isotopes were satisfactorily separated by the arrangement employed. The measurement of the differential partial cross section was made possible ✓

Card 1/2

A- 6.

83575

S/056/60/038/005/008,050
B006/B070

24.6510

AUTHORS:

Val'ter, A. K., Zalyubovskiy, I. I., Klyucharev, A. P.,
Pasechnik, M. V., Pucherov, N. N., Chirko, V. I.

TITLE:

Angular Distributions of 6.8-Mev Protons Elastically
Scattered by Chromium-, Nickel-, and Copper Isotopes

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 38, No. 5, pp. 1419-1423

TEXT: The authors have determined the angular distribution of 6.8-Mev protons elastically scattered by Cr^{52,53}, Ni^{58,60,62}, and Cu^{63,65}. (6.8+0.1)-Mev protons were obtained from the cyclotron of the Institut fiziki AN USSR (Institute of Physics of the AS UkrSSR). The scattered protons were recorded by a scintillation spectrometer which consisted of a CsI(Tl) crystal, a photomultiplier of the type ФЭУ-29 (FEU-29), and a 50-channel pulse-height analyzer of the type АИМА-1 (AIMA-1). Measurements were made between 20° and 160° every 5°, the angles being determined with an accuracy of 0.3°. Depending on the thickness of the target, the energy resolution of the scintillation spectrometer was 4.6%.

Card 1/3

83575

Angular Distributions of 6.8-Mev Protons
Elastically Scattered by Chromium-, Nickel-,
and Copper Isotopes

S/056/60/03n/005/008/052
B006/B070

The energy spectrum of the scattered protons was taken for each angle of measurement. The differential scattering cross section was determined in the center-of-mass system. Free films of $3 - 5 \mu$ thickness, enriched in the isotope to be studied to 93-98% served as targets. The compositions of the targets are given in a table. For a majority of the investigated nuclei, the energy resolution of the scintillation spectrometer was adequate to separate the group of inelastically scattered protons from that of elastically scattered protons. One of these energy spectra (Cr^{52}) is shown in Fig. 1. In this spectrum taken at 90° the first level (1.44 Mev) is distinctly marked; this group of protons can be well separated from the elastically scattered protons. The groups of protons related to the excitation of the lowest levels, 0.54 and 1.01 Mev, of the Cr^{53} nucleus can make a significant contribution to the elastic scattering, particularly for large scattering angles, because the high-energy resolution is inadequate. The angular distribution of elastically scattered protons for the two chromium isotopes and $E_p = 6.8$ Mev is shown in Fig. 2. The first excited states of $\text{Ni}^{58,60,62}$ are at 1.44, 1.33, and 1.17 Mev, respectively. The proton groups corresponding to these levels can be easily separated from the group of

Card 2/3

X

SL384

S/056/60/ 4 48
B004/B070

24.6520

AUTHORS.

Pasechnik, M. V., Fucherov, N. N., Orlenko, B. F.,
Prokopenko, V. S.

TITLE.

Polarization of 6.8-Mev Protons on Scattering From Carbon ¹⁹

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 4(10), pp. 915-916

TEXT: The purpose of the present work was to study the spin - orbit interaction in the elastic scattering of 6.8-Mev protons from carbon, and to examine the suitability of carbon as the second scatterer in polarizing instruments. The carbon target consisted of a polystyrene film filled with graphite powder. The thickness of the target was of the order of 10 mg/cm^2 . The doubly scattered protons (second scattering angle = 45°) were recorded by means of 200μ thick $\text{R}-1$ ($\text{Ya}-1$) nuclear photoplates. The data for the asymmetry of distribution observed experimentally after the second scattering are given in a Table. The considerable thickness of the target prevented the use of known data on the polarization of

Card 1/2

33091

S/638/61/001/000-013 050

B105/B110

124.6600

AUTHORS: Pasechnik, M. V., Pucherov, N. N., Totskiy, I. A., Chirko, V. I.

TITLE: Dispersion of medium-energy nucleons and the optical nuclear model

SOURCE: Tashkentskaya konferentsiya po mirnymy ispol'zovaniyu atomnoy energii. Tashkent, 1961. Trudy. v. 1. Tashkent, 1961, 10² - 10³

TEXT: The authors studied the angular distributions of elastically scattered 6.8-Mev protons and 2.8-Mev neutrons. The protons were obtained from the cyclotron of the Institut fiziki AN USSR (Institute of Physics AS UkrSSR). The scattered protons were recorded with a scintillation spectrometer consisting of a CsI(Tl) crystal, an ФЭУ-29 (FEU-29) photomultiplier and an electronic recorder. Due to the energetic resolution of the instrument (3.5 - 4%) the group of elastically scattered protons can be separated from that of the inelastically scattered protons. The angular distribution of elastically scattered protons was measured between 20 and 160°. Bi, Pb, Sn, Cd, Ag, Zn, Cu, Ni, Co, Fe, or Al were used as targets. Nuclei whose Coulomb barrier allowed the incident protons to

Card 1/4 X

33091
S/638/61/001/000/013/056
B105/B110

Dispersion of medium-energy nucleons ...

enter the range of action of the nuclear forces showed deviations of the experimental cross section from the Rutherford cross section (Fig. 1). The reaction D(d,n)He³ served as neutron source (bombardment of heavy ice by 130-kev deuterons). The scattered neutrons were measured in an 11-atm methane chamber with collecting electrode (25 - 105°). It was found that the angular distributions of elastically scattered neutrons strongly differ also for elements with approximately equal atomic weight. A variant of the optical model with diffuse surface is suggested, with a potential $V(r) = \{1 + \exp[(r-R)/a]\}(V + iW)$, where V, W, R, a are the model parameters according to R. D. Woods, D. S. Saxon (Phys. Rev., 95, 577, 1954). The results of calculations on the basis of this model were in good agreement with the experimental data (Fig. 3). Experiments on proton scattering from separated isotopes (Ni⁵⁸, Ni⁶⁰, Ni⁶², Cr⁵², Cr⁵³) made together with A. P. Klyucharevskiy and I. V. Zalyubovskiy also gave different angular distributions which are explained by the shell structure of the nucleus. To gather experimental material further experiments of this kind are being conducted in the authors' laboratory. There are 3 figures and 11 references: 4 Soviet and 7 non-Soviet. The four references to English-language publications read as follows: Bromly, D. A.. Card 2/4.

PASECHNIK, M.V. [Pasichnyk, M.V.]; ORLENKO, B.F.; PROKOPENKO, V.S.;
CHIRKO, V.I. [Chyrko, V.I.]

Scattering of protons by tin isotopes. Ukr. fiz. zhur. 6 no.3:425-
426 My-Je '61. (MIRA 14:8)

1. Institut fiziki AN USSR, g. Kiyev.
(Protons—Scattering)
(Tin—Isotopes)

PASECHNIK, M.V. [Pasichnyk, M.V.]

Structure of the atomic nucleus. Ukr. fiz. zhur. 6 no.5:583-
595 S.O '61. (MIRA 14:11)

1. Institut fiziki AN USSR, g. Kiyev.
(Nuclei, Atomic)

PASECHNIK, M.V. [Pasichnyk, M.V.]; IVANITSKIY, P.G. [Ivanyts'kyi, P.H.]

Ground state spins and parities in nickel isotopes. Ukr. fiz.
zhur. 6 no.5:603-607 S.-O '61. (MIRA 14:11)

1. Institut fiziki AN USSR, k. Kiyev.
(Nuclear reactions)
(Nickel--Isotopes)

VAL'TER, A.K.; ZALYUBOVSKIY, I.I.; KLYUCHAREV, A.P.; LUTSIK, V.A.; ORLENKO,
B.F.; PASECHNIK, M.V.; PROKOPENKO, V.S.; PUCHEROV, N.N.

Angular distribution of 6.8 mev. protons elastically scattered on
nickel and zirconium isotopes. Zhur.eksp.i teor.fiz. 41 no.1:71-
74 Jl '61. (MIRA 14:7)

1. Institut fiziki AN Ukrainskoy SSR i Fiziko-tehnicheskiy institut
AN Ukrainskoy SSR.
(Protons--Scattering) (Nickel--Isotopes) (Zirconium--Isotopes)

AN4007942

BOOK EXPLOITATION

S /

Pasechnik, Mitrofan Vasil'yevich

Problems in neutron physics of medium energy (Voprosy* neytronnoy fiziki srednikh energiy). Kiev, Izd-vo AN USSR, 1962. 335 p. illus., biblio., tables. Errata slip inserted. 3000 copies printed. Sponsoring Agency: Akademiya nauk Ukrainskoy SSR.

TOPIC TAGS: nuclear physics, neutron, neutron physics, medium energy neutron, neutron source, neutron spectrometry, neutron scattering, elastic scattering, inelastic scattering

PURPOSE AND COVERAGE: This book is intended for students and scientific personnel working in the field of atomic and nuclear physics and for engineers working with reactors. The book is a generalization of results of scientific investigation of medium-energy neutron interactions with nuclei. In addition, data on nuclear constants necessary for calculating and designing atomic reactors are given. The author thanks Candidates of Science I. F. Barchuk, V. P. Vertebnay, A. M. Korolev, G. S. Krishtab, O. F. Nemets, R. G.

Card—1/6

PASECHNIK, M.V. [Pasichnyk, M.V.]; BARCHUK, I.F.; KLIMENTOV, V.B.
[Klymentov, V.B.]

Experimental investigation of the physical parameters
of the VVR-M [water moderated-water cooled] reactor of the
Institute of Physics of the Academy of Sciences of the
Ukrainian S.S.R. Ukr.fiz.zhur. 7 no.1:3-14 Ja '62. (MIRA 15:11)

1. Institut fiziki AN UkrSSR, Kiyev.
(Kiyev—Nuclear reactions)

PASECHNIK, M.V. [Pasichnyk, M.V.]; TAMBOVTSEV, D.I.

Polarization of protons from the reaction $\text{Be}^9(\text{d},\text{p}) \text{Be}^{10}$.
Ukr.fiz.zhur. 7 no.1:74-75 Ja '62. (MIRA 15:11)

1. Institut fiziki AN UkrSSR, Kiyev.
(Nuclear reactions)
(Protons) (Beryllium)

PASECHNIK, M V

1
Soviet Science
Series 17
No. 1

AUTHORS: Vertebov, V. I., Vlasov, M. F., Kondratenko, T. V., Chikishev, G. A., Nekraschuk, N. V.

TITLE: Spectra of μ -mesons produced in the interaction of π^- mesons with the μ BAA-1(B) counter

PUBLICATION: Atomnaya energiya, v. 10, no. 4, p. 39, 1961

TEXT. The energy distribution of mu mesons produced in the interaction of π^- mesons with the μ BAA-1(B) counter is measured. The counter is based on the principle of time-of-flight. The active zone of the counter is 10 cm in diameter. The drift tube has a length of 175 mm and a diameter of 10 mm. The counter consists of two cylindrical electrodes and the central anode. The counter is supplied with a current of 10 mA. The counter is connected to a mechanical interrupter of 30 mm diameter with a frequency of 1000 Hz. The counter is connected to a scintillation counter, which can be rotated at a speed of 10⁴ to 10⁵ revolutions per minute. The counter has a drift tube of 175 mm length and a battery of boron carbide. Another arrangement with a 175 mm long drift tube is based on the principle of time-of-flight. The time of flight is measured by means of a multichannel time-of-flight counter, the μ BAA-1 (17A-1), developed in the laboratory of nuclear effect. (See also CIA-RDP86-00513R001239320006-4)

Card 1/2

Spectrum of a 1% beryllium...

and infrared. The measured values of the absorption coefficient for Maxwell beryllium are 10% higher than the calculated values. The absorption-coefficient values are very near to those reported by G. V. S. and V. V. Kostylev. The following table gives the absorption coefficients for Maxwell beryllium that were observed at the 1.4 energy and at the wavelength of 1.05 microns. The absorption of the beryllium. An intent to make a more detailed study of the spectrum of beryllium is related to a corresponding article in the literature on the spectrum of beryllium. There are 3 figures and 3 Soviet references.

SUMMITTED: July 9, 1961

Card 2/2

S/056/62/043/333/007, cc
B125, B102

AUTHOR: Ivanitskii, I. V., Ivanitskaya, P. G.

TITLE: Investigation of the stripping reaction on nickel isotopes

PUBLICATION: Zhurnal eksperimental'noi teoricheskoy fiziki, v. 41,
no. 5(9), 1961, p. 777 - 782

TEXT: The angular and energy distributions of the protons from the stripping reactions occurring on Ni⁵⁸, Ni⁶⁰, Ni⁶², and Ni⁶⁴ with E_d = 13.0 kev were recorded between 10 and 1400, with a scintillation spectrometer in a pulsed channel pulse height analyzer. All results are the sum values of three measurements. The 13.0-kev deuterons were obtained from the cyclotron of the Institute of Physics of the USSR (Institute of Physics of the USSR) thin free metal foils used as targets contained 90 to 95% of the element to be studied. Fig. 1 shows the proton energy spectra taken at 13.0 keV incident deuteron beam. Most of the proton groups do not correspond to single levels but form groups of neighboring levels. The angular distributions for states with $\alpha = 5.6, 4.5$, and 1.1 kev (for example see Fig. 2 B) are in good agreement with the theoretical curves.

Card 1/6

Investigation of the structure...

3,136,37,45,11,11,11
B124, B132

This is not true of the more complicated theory for $\alpha = 3.6$ e.v. Present results generally agree with those of other authors (W. J. et al. Pr. Phys. Sov., 77, 647, 1954). In the region of the first maximum, the experimental angular distributions agree with the theoretical curves. The experimental and theoretical second maxima have different heights and positions because the simple Butler theory does not take into account Coulomb and nuclear interactions. The agreement can be improved by V. A. Tolokon (Phys. Rev., 115, 138, 1959) by calculating the final state restricted to the two values $l_n \pm 1/2$ by selection rules, corresponding to the captured neutron. Spin and parity $1/2^+$ correspond to the value $l_n = 0$. There are 2 figures and 2 tables.

ASSOCIATION: Institut fiziki Akademii nauk Ukrainskoy SSR (Institute of Physics of the Academy of Sciences Ukrainian Soviet Socialist Republic)

SUBMITTED: March 31, 1962

Card 2/6

43360

24 66.70

S/056/62/043/005/002/058
B164/B102

AUTHORS: Pasechnik, M. V., Saltykov, L. S., Tambovtsev, D. I.

TITLE: Polarization of protons in stripping reactions on light and medium nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 5(11), 1962, 1975 - 1578

TEXT: The authors investigated the angular dependence of the proton polarization $P(\theta)$ in $(1,p)$ stripping reactions, using the device described by D. I. Tambovtsev (Ukr. fiz. zhurn., 7, 245, 1962). The cyclotron of the IF AN USSR was used to accelerate the deuterons to 13.8 Mev. $P(\theta)$ is investigated for Be^9 , Be^{10} and Ca^{40} and angles θ from 10 to 70° . $P(\theta)$ is measured at small angles for Si^{28} , Ni^{58} and Ni^{60} . The statistical errors were found to be 3-4% at small and 8-9% at large angles. Additional errors originated from the background and shift of the proton beam. The values for the proton polarization obtained for Be^9 and Be^{10} agree, in practice, with those measured at lower deuteron energies, i.e. at small

Card 1/2

Polarization of protons...

1050/62/043/005/002.0-4
B104/B102

angles the energy dependence of the polarization is small. The authors compare the experimental $P(\theta)$ curves for Be^7 , Be^{10} , Ca^{40} and Ni^{58} with the corresponding differential cross sections $c(\theta)$. All nuclei show the same qualitative behavior, with the characteristic correlation between the maximum of $P(\theta)$ and the minimum of $c(\theta)$. At angles smaller than 15° , $P(\theta)$ is found to increase, whereas a minimum is observed in the region of the principal maximum of $c(\theta)$. A slight increase and a strong decrease then follow, in which the sign of the polarization might even change. At larger angles, P reaches values which equal approximately those in the principal maximum of $c(\theta)$. The course of $P(\theta)$ calculated for Be^{10} by Tobokman (Phys. Rev. 115, 98, 1953) for a deuteron energy of 8 Mev shows good qualitative agreement with the experimental values obtained. There are 4 figures and 1 table.

SUBMITTED: March 3, 1962

Card 2/2

S/020/62/147/006/012/034
B104/B180

AUTHORS: Val'ter, A. K., Academician AS UkrSSR, Klyucharev, A. P.,
Lutsik, V. A., Olenko, B. F., Pasechnik, M. V., Academician
AS UkrSSR, Prokopenko, V. S., Pucherov, N. N.

TITLE: The elastic scattering of 6.9 Mev protons by chromium and
zinc isotopes

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1325-1327

TEXT: A method described by A. K. Val'ter et al. (ZhETF, 38, 1419
(1960)) was used to investigate the elastic scattering of (6.9 ± 0.07)
Mev protons by Cr⁵⁰, Cr⁵⁴, Cr⁵², Cr⁵³, Zn⁶⁴, Zn⁶⁸, Zn⁷⁰. Between 20 and
160°, the angular distribution of the elastically scattered protons was
determined in the form of the angular dependence of $\sigma_{\text{exp}}/\sigma_{\text{Rutherford}}$
every 5°. For chromium the results obtained (Fig. 1) show that the
(p,n) reaction definitely makes a partial contribution to the proton
scattering by Cr⁵² (reaction threshold 5.63 Mev) and a strong contribution
when the protons are scattered by Cr⁵³ and Cr⁵⁴. (p,n) reaction thresholds
Card 1/b2

S/120/63/000/001/011/072
E140/E135

AUTHORS: Pasechnik, M.V., Ofengenden, R.G.,
~~Konenko, L.D.~~, and Shaleyko, M.A.

TITLE: Pulse amplitude analyzer АИМА-2 (AIMA-2)

PERIODICAL: Pribory i tekhnika eksperimenta, no.1, 1963, 57-60

TEXT: This paper was presented at the 4th conference on nuclear electronics at Moscow in 1959, and describes an instrument completed in 1955. The basic memory unit of the analyzer is a magnetic drum, and the pulse discrimination is carried out by a method described in 1951 (G.W. Hutchinson, G.G. Scarrott, Philos. Mag., 1951, v.42, no.330, 792). There are 3 figures.

ASSOCIATION: Institut fiziki, AN USSR
(Physics Institute, AS UkrSSR)

SUBMITTED: March 15, 1962

Card 1/1

S/089/63/014/002/004/019
B102/B186

AUTHORS: Nemets, O. F., Pasechnik, M. V., Pucherov, N. N.

TITLE: Investigation of nuclear reactions at the cyclotron of the
Institut fiziki AN USSR (Institute of Physics AS UkrSSR)

PERIODICAL: Atomnaya energiya, v. 14, no. 2, 1963, 159 - 170

TEXT: This paper gives a review of the investigations of the nuclear reactions carried out at the cyclotron of the Institute of Physics AS UkrSSR during the years 1957 - 1961. Pertinent material assembled by the research team was also published in various journals. Mention is made of the investigations of the elastic and inelastic scattering of 6.8-Mev protons and 13.6-Mev deuterons from different metals of natural isotopic composition as well as from separated isotopes. Furthermore the energy and angular distributions of the protons in deuteron stripping reactions, etc. were studied. The experimental material is clearly presented in tabular form. There are 6 figures, 3 tables, and 50 references. ✓

SUBMITTED: July 19, 1962

Card 1/1

S/056/63/044/004/001/044
B102/B186

AUTHORS: Pasechnik, M. V., Ivanitskiy, P. G.

TITLE: Investigation of the stripping reaction on chromium isotopes

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 4,
1963, 1129 - 1135

TEXT: The proton angular distributions in (d,p) reaction was measured with the isotopes Cr^{50,52,53,54} at $E_d = 13.6$ Mev. The Cr⁵⁰ and Cr⁵⁴ (d,p) reactions were investigated for the first time. Method and experimental arrangement are described in Ukr. fiz. zhurn., 6, 603, 1961. The targets used were free thin films of 20 mm in diameter, enriched in the isotope to be studied. The angular distributions were measured in the interval 7.5 - 100° (c.m.s.) and the results were compared with Butler's theory (Nuclear Stripping Reactions, IIL, 1960). For the ground and several excited states of the final nuclei the values of l_n are determined, and on comparing experimental and theoretical distribution curves the best values of l_n and r_0 are found. The results are given in the table. There are 5 figures and Card 1/4.

~~S/056/63/044/004/001/044~~

B102/B186

Investigation of the stripping...

2 tables.

ASSOCIATION: Institut fiziki Akademii nauk Ukrainskoy SSR (Institute of Physics of the Academy of Sciences Ukrainskaya SSR)

SUBMITTED: August 24, 1962

Table 1

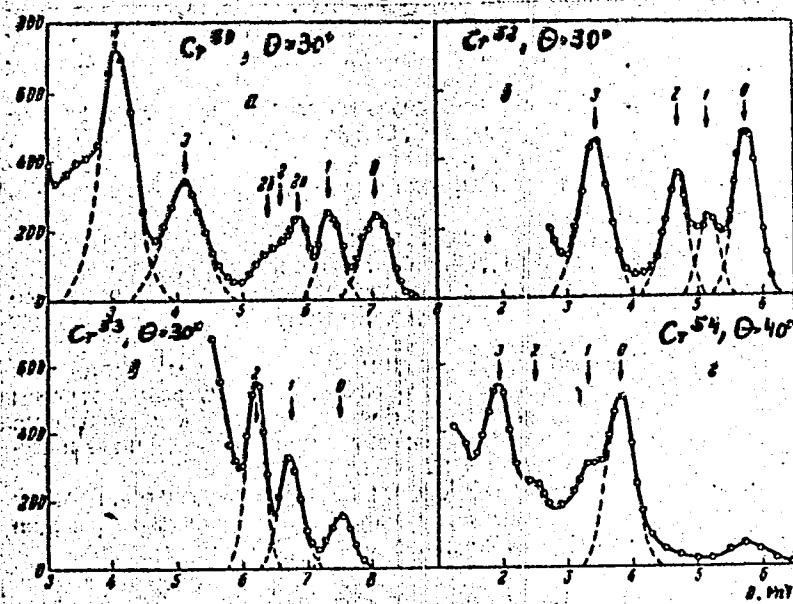
target	γ^{Cr}	C^{40}	C^{41}	C^{42}	C^{43}
	enrichment	(%)			
Cr^{40}	2,895	87,7	11,1	0,9	0,3
Cr^{42}	3,211	0,2	00,0	0,7	0,1
Cr^{43}	3,790	0,2	13,8	84,3	1,7
Cr^{44}	2,895	0,4	10,9	10,1	78,6

Card 2/4

S/056/63/044/004/001/044
B102/B186

Investigation of the stripping...

Fig. 1



Card 3/4

Investigation of the stripping...

S/056/63/044/004/001/044
B102/B106

Table 2

	Q, MeV	excitation energy, MeV	J_π	$T_p, 10^{-13} \text{ sec}$	$\sigma, \text{mb}/\text{sr}\cdot\text{sec}$	$(2T+1)\Omega^2$
$\text{Cr}^{39}(d, p) \text{Cr}^{38}$	7.08	0	3	0.19	$1/2^-, 3/2^-$	1.36
	6.33	0.75	1	5.8	$1/2^-, 3/2^-$	15.05
	5.70	1.17	1	5.5	$1/2^-, 3/2^-$	8.57
		1.42				0.076
		1.53				0.042
$\text{Cr}^{39}(d, p) \text{Cr}^{38}$	4.16	2.92	1	5.5	$1/2^-, 3/2^-$	14.09
	3.11	3.97	1	5.5	$1/2^-, 3/2^-$	14.95
		5.74	0	1	$1/2^-, 3/2^-$	24.00
	5.18	0.58	1	5.5	$1/2^-, 3/2^-$	9.38
	4.73	1.00	3	6.0	$1/2^-, 3/2^-$	1.92
$\text{Cr}^{39}(d, p) \text{Cr}^{38}$	3.41	2.33	1	5.5	$1/2^-, 3/2^-$	18.55
	7.55	0	1	6.28	$0^+, 1^+, 2^+, 3^+$	1.31
	6.69	0.81	1	5.8	$0^+, 1^+, 2^+, 3^+$	3.76
$\text{Cr}^{39}(d, p) \text{Cr}^{38}$	6.28	1.23	1	5.5	$0^+, 1^+, 2^+, 3^+$	3.38
	3.8	0	1	5.5	$1/2^-, 3/2^-$	24.63

σ is the differential cross section for the maximum.
Card 4/4

PASECHNIK, M. V.; FUCHEROV, N. N.; CHIRKO, V. I., Kiev

"Isotopic effects and polarization in the elastic scattering of protons."

report submitted for Int'l Conf on Low & Medium Energies Nuclear Physics,
Paris, 2-8 Jul 64.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5

PASECHNIK, M. V.; BARVINK, I. F.; VERTENNY, V. I.; VLAROV, M. F.; ELOSTIN, N. V.;
MAYSTRENKO, A. N.; MATOVICH, V. I.; NADARZHNE, M. M.; PILLER, J. I.

"The parameters of the 300-MHz magnetron in the 100-kW pulsed klystron
application in the design of the power supply."

Report submitted by the Institute of Applied Physics of the USSR Academy of Sciences,
19 August 1986.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5"

PASICHNIK, N.V. [Pasichnyk, N.V.]; CHILIK, V.I. [Chyrka, V.I.]

Polarization of 6.9 Mev. protons elastically scattered on nickel isotopes. Ukr. fiz. zhur. v no.5:576-577 by '64. (p. 17).

I. Institut fiziki Ak. UkrSSR, Kiyev.

VERTEBNYY V.P.; LTYB, I.P.; MAYSTRENK, A.N. [Maistrenko, S.N.]; PASECHNIK,
M.V.

Effect of close-range order in liquids on the total interaction
cross sections of cold neutrons. "kr. fiz. zhur." no.6:684-686
Je '64.
(MFA 12:11)

I. Institut fiziki AN UkrSSR, Kiyev.

PASECHNIK, M.V.; BATALIN, V.A.; KORZH, I.A.; TOTSKIY, I.A.

Scattering of 0.5 and 0.8 Mev. neutrons by medium and heavy nuclei.
Atom energ. 16 no.3:207-211 Mr '64. (MIRA 17:3)

ACCESSION NR: AP4020339

S/0089/64/016/003/0260/0262

AUTHOR: Korzh, I. A.; Kopytin, N. S.; Pasechnik, M. V.; Pravdivy, N. M.; Sklyar, N. T.; Totskiy, I. A.

TITLE: Scattering of neutrons with energies of 0.5 and 0.8 Mev. in light and intermediate nuclei

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 260-262

TOPIC TAGS: neutron scattering, light nucleus, intermediate nucleus, threshold detector, anisotropy, neutron C, Na, Mg, Al, Ni, Cu, Se, Te

ABSTRACT: Measurements of angular distributions of elastically scattered neutrons with energies of 0.5 and 0.8 Mev. in light and intermediate nuclei (C, Na, Mg, Al, Ni, Cu, Se, Te) were completed in 1959 by a method described by M. V. Pasechnik, ("Atomnaya energiya", 16, 1964, 207). A detector was selected as threshold in order to prevent the recording of nonelastic scattered neutrons. Taking this threshold into account, the scattering of neutron energy was \pm 50 kev. for both neutron energies so that the results regarding resonances for all tested nuclei may be considered as average. Measurements were conducted for 8

Card 1/2

MAL'KO, A.I. [Mal'ko, O.I.]; PASECHNIK, M.V. [Pasichnyk, M.V.]; SALTYKOV, I.S.

Asymmetry of the angular distribution of the products of the reaction
 $\text{Si}^{28}(\text{d}, \text{d})\text{Si}^{28}$ with polarized deuterons. "kr. fiz. zhur." 10 n. 4:454-
453 Ap '65. (MIRA 18:5)

I. Institut fiziki AN UkrSSR, Kiyev.

L 64369-65 E#T(m)/EPF(c)/EWP(t)/EWP(b) DIAAP/IJP(c) JD/DM
ACCESSION NR: AP5014533 UR/0089/65/018/005/0452/0455
539.17.02 53
AUTHOR: Vertebnyy, V. P.; Dzyub, I. P.; Maystrenko, A. N.; Pasechnik, M. V.
TITLE: Coherence effects in the interaction between slow neutrons and liquids 10
SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 452-455
TOPIC TAGS: liquid nitrogen, liquid oxygen, slow neutron, neutron cross section, coherence effect 27 27

ABSTRACT: The total cross sections for the interactions of neutrons having wavelengths in the range from 4 to 15 Å with liquid nitrogen and oxygen, and also with gaseous nitrogen, were determined as functions of the neutron wavelength with the VVR-M reactor of the Institut fiziki (Physics Institute) AN UkrSSR.¹⁴ Nitrogen and oxygen were chosen for the observation of coherence effects in the scattering of slow neutrons, because of their large coherent cross sections. The experimental set-up is shown in Fig. 1 of the Enclosure. Both liquefied gases were investigated near the boiling point. The cross sections of the gaseous oxygen and nitrogen were found to increase monotonically with increasing wavelength, while the cross sections of the liquids began to decrease at ~5-5.5 Å. This effect is attributed to the existence of close-range order in the liquids, and is analogous in

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L 64369-65

ACCESSION NR: AP5014533

12

its nature to the scattering of neutrons in polycrystals at wavelengths close to $\lambda = 2d_{\text{max}}$. The question of the existence of coherence effects in the total cross section of heavy water is also considered. "The authors thank V. A. Gul'ko, V. F. Razbudey, V. L. Nechitaylo, and V. A. Medvedev for help in the course of the work."

Orig. art. has: 6 figures and 7 formulas. 44, 53

ASSOCIATION: none

SUBMITTED: 18 May 64

ENCL: 01

SUB CODE: NP

NR REF Sov: 000

OTHER: 008

Card 2/3

L 64369-65

ACCESSION NR: AP5014533

ENCLOSURE: 01

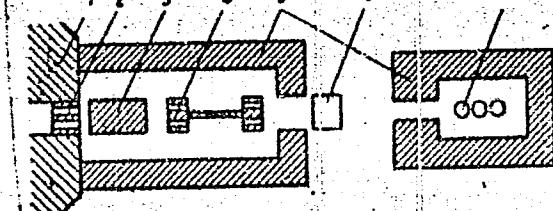


Fig. 1. Setup for the measurement of the total neutron cross sections of nitrogen and oxygen

- 1 - Reactor shield, 2 - collimator, 3 - beryllium filter,
4 - monochromator (or chopper), 5 - radiation shielding,
6 - cryostat or container with gas, 7 - boron counter.

llc
Card 3/3

L 44039-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/HW
ACC NR: AP6032231 SOURCE CODE: UR/0367/66/003/005/0842/0348

AUTHOR: Kashuba, I. Ye.; Kozin, B. G.; Pasechnik, M. V.; Pucherov, N. N.; Chirko, V. I.

ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Analysis of the elastic scattering of 6.9 MeV protons by Ni isotopes and the nuclear optical model 19 27

SOURCE: Yadernaya fizika, v. 3, no. 5, 1968, p. 348

TOPIC TAGS: elastic scattering, proton polarization

ABSTRACT: The differential cross-sections and polarizations of 6.9 MeV protons, elastically scattered by Ni isotopes, were calculated on the basis of the optical model. It is shown that the model parameters giving the best agreement between theory and experiment differ significantly for various NI isotopes. An uncertainty exists in the choice of the depth and diffusion parameters b and W in the imaginary part of the potential for $Wb = \text{const}$. It is shown that the uncertainty in the choice of the optimal set of optical model parameters is significantly decreased if the analysis of the data on elastic scattering takes the angular dependence of the polarization as well as the differential cross-section into account. The authors thank the staff of the Institute of Cybernetics AN UkrSSR for making possible the calculations of the electronic computers as well as for assuring the operation of the machines. Orig. art. has: 3 figures, 7 formulas and 1 table. (Based on authors' Eng. abst.) [JPRS: 36,712]

SUB CODE: 20 / SUBM DATE: 26Feb69 / JDG RNF: 005 / OTH REF: 003

Card 1/1 blg 0919 12.56

L 16657-66 ENF(m)/EPF(n)-2/ENR(h)
ACC NRT AP8005524
(N)

SOURCE CODE: UR/0089/66/020/001/0000/0017

AUTHOR: Korzh, I. A.; Pasechnik, M. V.; Totskiy, I. A.

ORG: none

TITLE: Scattering of moderate energy neutrons *[p, γγ, S]*

SOURCE: Atomnaya energiya, v. 20, no. 1, 1966, 8-17

TOPIC TAGS: neutron scattering, thermal neutron, elastic scattering, inelastic scattering, nuclear scattering, nuclear shell model, optic model

ABSTRACT: This paper is a brief review of research on scattering of neutrons in the intermediate energy range using the electrostatic generator at the Institute of Physics AN UkrSSR. Data are given on inelastic scattering of neutrons with energies of 0.8, 2.5, 3.3, 3.6 and 4.1 Mev by nuclei of the following elements: C, Na, Mg, Al, P, S, Cl, Ca, Cr, Fe, Co, Ni, Cu, Zn, Se, Zr, Mo, Ag, Cd, Sn, Sb, Te, I, Ba, W, Hg, Pb, Bi and U. The resultant data were used for establishing the effect of nuclear shells in inelastic scattering of neutrons. The angular distribution of elastically scattered neutrons with energies of 0.3, 0.5, 0.65 and 0.8 Mev by the nuclei

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UDC: 539.171.016+539.171.017+539.172.4

30
B

L 16657-66
ACC NR: AP6005524

of 25 elements were studied in a wide range of mass numbers: C, Na, Mg, Al, Si, K, Cr, Fe, Ni, Cu, Zn, Se, Zr, Mo, Ag, Cd, Sn, Sb, Te, Ba, W, Hg, Pb, Bi, and U. The experimental data on angular distribution of elastically scattered neutrons were used for verifying the applicability of the optical model of the nucleus for describing processes of elastic scattering at an energy lower than 1 Mev. Orig. art. has: 6 figures, 3 tables.

SUB CODE: 20/ SUBM DATE: 17Mar65/ ORIG REF: 019/ OTH REF: 008

TS
Card 2/2

LYAMIN, Yu.; UTKIN, E.; SVERDLYUK, Sh.; AKOSTA, S.; BRLOVA, A.; BALUYGA, N;
GOL'D, A.; ZVEZDINA, A.; PASECHNIK, N.; SHEYNGAUZ, S.

Revolving credit. Den. i kred. 17 no. 4:52-61 Ap '59.
(MIRA 12:8)
(Credit)

PASECHNIK, N.

"Basic theory of telegraph apparatus." N.B. Zeliger, S.I. Vinokur.
Reviewed by N. Pasechnik. Elektrosviaz' 10 no.6:78-79 Je '56.

(MLRA 9:8)

(Telegraph--Apparatus and supplies)(Zeliger, N.V.)(Vinokur, S.I.)

PASECHNIK, Nikolay Dmitriy vich; PISARENKO, F.G., red.

{Elementary electrical engineering} Elementarnaya elek-
trotehnika. - Izd. 1. - spr. izd. Kiev, "Tekhnika," 1974. 531 p.
(MIRA 17;5)

L 57974-65
ACCESSION NR: AP5016723

Pn-4/Pp-4/Pac-4

UR/0286/65/000/010/0041/0041
621.315.052.7

47
46

AUTHOR: Berkman, N. A.; Gontar', V. M.; Gurov, V. S.; Darova, P. I.; Yefrakhin,
N. N.; Zolotarev, Ya. M.; Zrazhevskiy, S. P.; Kopp, V. M.; Paschnik, N. D.;
Ponomarenko, V. A.; Pugach, A. B.; Raykin, P. S.; Sergeyev, T. V.

TITLE: System for measuring the duration and number of interruptions in a communication channel. Class 24, No. 171023

SOURCE: Byulleten' izobryeteniy i tovarnykh znakov, no. 10, 1965, 41

TOPIC TAGS: noise measurement, frequency meter, communication channel, pulse meter

ABSTRACT: The proposed measuring device converts the spectrum of the investigated pilot (measuring) frequency to a region of higher frequencies and uses a filter to separate the side band containing information on the signal envelope. Provision is made for simultaneous analysis of pulse noise and decline in the level of the pilot frequency with respect to voltage and duration. Information on interruption time is transmitted in the form of quantized pulse packets to a measuring circuit consisting of flip-flops, AND gates, and registers. Orig. art. has: 1 figure. (DW)

Card 1/2

L 57874-65
ACCESSION NR: AP5016723

ASSOCIATION: Kiyevskoye otdeleniye Tsentral'nogo nauchno-issledovatel'skogo
instituta svyazi Ministerstva svyazi SSSR (Kiev Department of the Central Scientific
Research Institute of Communications of the Ministry of Communications, SSSR)

SUBMITTED: 10Nov63

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4038

XL
Card 2/2

BERKMAN, N.A., BLEYKHMAN, V.D., PASHCHNIK, N.I., BULGACH, A.P.

Device for calculating errors in the transmission of discrete information at high speeds. Elektrosviač' 18 no.9;4-46 7 1948
(MCRA 10 14).

PASECHNIK, Nikolay Dmitriyevich; PISARENKO, M., redaktor; NOVIK, A.,
~~tekhnicheskiy pedaktor.~~

[Elementary electric engineering] Elementarnaia elektrotehnika.
Izd.4-oe, ispr.i dop. Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1957.
(MIRA 10:10)
223 p.
(Electric engineering)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5

PAGE ONE, ETC.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 06/15/2000 BY [redacted]

END: Initially part of mailing Appendix A, L. 1, 2, 3, 4, 5, 6, 7, 8, 9.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5"

PASECHNIK, Nikolay Dmitriyevich; SAVCHENKO, L.Ya. red.; MATUSEVICH,
S.M., tekhn. red.

[Elementary electrical engineering] Elementarnaia elektrotekhnika. 7., stereotipnoe izd. Kiev, Gostekhizdat USSR, 1963. 233 p.
(MIRA 16:6)

(Electric engineering)

FASECHNIK, Nikolay Dmitriyevich [Fasichnyk, M.I.]; SAVCHENKO,
I.Ya., red.

[Elementary electrical engineering] Elementarna elektron-
tekhnika. 2. vyprav. i doz. vyd. Kyiv, Derzhtekhvydav
USSR, 1961. 219 p. (MIA 18:6)

PASECHNIK, Nikolay Dmitriyevich; STRELKOVA, Rimma Apolosovna;
OSIPENKO, G.U., otv. red.; KOLOMOVA, Ye.V., red.

[reliability of terminal telegraph apparatus] Napravleniye
okonechnoi telegrafnoi apparatury. Moskva, Izd-vo "Sviaz",
1964. 47 p. (NIIKA 17:1)

L 10661-65 EWT(d)/FSS-2/SEC-4/EEC(t)/EED-2/FS(b) Pn-J/Pj-4/Pac-4 AFTC(b)/
ASD(d)/AFETR/ESD(dp)/ASD(a)-5/ESD(c)

ACCESSION NR: AP4045821

S/0106/64/000/009/0040/0046

B

AUTHOR: Berkman, N. A.; Blaykhman, V. S.; Pasechnik, N. D.; Pugach, A. B.

TITLE: Instrument for counting errors in the high-speed transmission of discrete information

SOURCE: Elektrosvyaz', no. 9, 1964, 40-46

TOPIC TAGS: error counting, error statistics, error counting instrument, information transmission, data transmission

ABSTRACT: A new instrument which is intended for testing a broadband channel for digital-data transmission at a speed of up to 60,000 bands is described. The instrument consists of a transmitter and a receiver. The transmitter comprises a clock generator and a test-signal generator, the latter producing various combinations of test signals and sending them into the channel. Mixed with noise and distorted in the channel, the signals arrive at the receiver, which comprises

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L 10661-68

ACCESSION NR: AP4045821

a signal regenerator, a synchronizer, a test-signal generator, an error isolator, an error counter, and an error recorder. The device is similar to conventional instruments used in telegraph work for the same purpose; however, its various units have special features determined by its high speed. The clock generator produces pulses at 36, 42, 54, and 60 thousand bauds, the frequencies being stabilized by quartz. The test-signal generator produces combinations 1:1, 1:6, 6:1, "key depression 0, key depression --," and a 160-element pseudo-random pulse train. Some details of the units and their connections are given. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 07May64

SUB CODE: EC

NO REF SOV: 004

O
ENCL: 00

OTHER: 003

Cord 2/2

PASECHNIK, O.A. [Pasiechnyk, O.A.]; RUBANOVICH, A.A. [Rubanovych, A.A.]

Determining sensitivity to antibiotics by the disk method for children with pneumonia. Ped., akush. i gin. 20 no.5:29-31 '58.

(MIRA 13:1)

1. Kafedra pediatrii (zav. - prof. R.Yu. Kol'ner) lechebnogo fakul'-teta Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta im. A.A. Bogomol'tsa (direktor - dots. I.P. Alekseyenko) na baze 1-y Dorozhnoy bol'nitsy g. Kiyeva (nach. - Z.Z. Bokhanovich).

(PNEUMONIA) (ANTIBIOTICS)

S/073/63/029/003/008/009
A057/A126

AUTHORS: Zolotukhin, V. K., Pasechnik, O. M.

TITLE: Chromatographic determination of the relative stability of complex compounds of beryllium and cadmium with some organic hydroxy acids

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 3, 1963, 335 - 338

TEXT: In the L'vovskiy gosudarstvennyy universitet (L'vov State University) the relative stability of citrate, tartrate, trihydroxyglutarate, malate, tironate (pyrocatechindisulfocacid), gluconate, and salicylate complexes of beryllium and cadmium was studied by the chromatographic method of M. M. Senyavin, and L. I. Tikhonova (Zh. neorg. khim., v. 12, 1956, 2772) in weakly alkaline solutions at pH 7.2 - 8.7. The method is based on the fact that the volume of elutriant (solution of the added complexing agent) necessary to attain the maximum elution of the cation from the cation exchange resin is inversely proportional to the stability of the complex formed by this cation with the given elutriant. Since the stability of complexes of the organic hydroxy acids depends on the pH, the latter was regulated correspondingly. Through the column filled with 5g

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S/073/63/029/003/008/009
A057/A126

Chromatographic determination of the...

cation exchange resin of type KY-2 (KU-2) there were passed first 2.0 ml of 0.1 M beryllium or cadmium sulfate solution at a rate of 0.1 ml/min respectively, then washed with alkali solution of a pH adequate to the solution of the corresponding complexing hydroxy acid until constancy of pH was attained. Afterwards a 0.1 M solution of the sodium salt of the hydroxy acid was passed at a 1 ml/min rate. In the eluted solution beryllium was determined by the fluoride method and cadmium polarographically. Relative to the stability of the beryllium complexes the following sequence was observed: malate = trihydroxyglutarate > tironate > citrate = salicylate > tartrate > gluconate. The analogous sequence for cadmium complexes is: tironate > citrate > trihydroxyglutarate > malate > tartrate > salicylate > gluconate. Thus the most stable and therefore important beryllium complexes in weakly alkaline media are trihydroxyglutarate and malate complexes, while the most stable cadmium complexes are tironate complexes. However, the greatest difference in stability between these two elements show the salicylate complexes. Beryllium was separated from cadmium by elution with sodium salicylate solution (200 ml of a 0.1 M solution) with 100% efficiency at approximate pH 8.5. Chromatographical separation of beryllium

Card 2/3

Chromatographic determination of the...

S/073/63/029/003/008/009
A057/A126

from cadmium can be effected also with gluconate and possibly with malate or trihydroxyglutarate complexes. There are 2 tables.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet (L'vov State University)

SUBMITTED, August 23, 1961

Card 3/3

ZOLCTUKHIN, V.K.; Prinimala uchastiy- PASECHNIK, O.M.

Gluconate complex compounds of beryllium. Ukr. khim. zhur. 39
no.6;565-570 '64. (MIRA 1845)

1. L'vovskiy gosudarstvennyy universitet.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5

COL TURPIN, J.R.; 1st Lt, USAF; 1940-1945

Trinity, TX, USA
30 May 1945

1. University of Texas at Austin

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CIA-RDP86-00513R001239320006-5"

ZOLOTUKHIN, V.K.; PASECHNIK, O.M.

Chromatographic determination of the comparative stability of beryllium
and cadmium complex compounds with some organic hydroxy acids. Ukr.khim.
zhur. 29 no.3:335-338 '63. (MIRA 16:4)

1. L'vovskiy gosudarstvennyy universitet.
(Beryllium compounds) (Cadmium compounds) (Acids, Organic)

PASECHNIK, P.I. (Kiyev, ul. Sh.Rustaveli, d.26, kv.7)

Use of transverse tomography in determining the localization
of metallic foreign bodies in the chest cavity. Klin.khir.
no.7:69-70 Jl '62. (MIRA 15:9)

1. Rentgenodiagnosticheskiy otdel (zav. - starshiy nauchnyy
sotrudnik A.I.Pozmogov) Kiyevskogo nauchno-issledovatel'skogo rent-
geno-radiologicheskogo i onkologicheskogo instituta.
(CHEST---FOREIGN BODIES) (DIAGNOSIS, RADIOSCOPIC)

PASECHNIK, P.I.; SILENCHUK, N.A.

Diagnosis of the transposition of the acrtal arch to the right side. Vrach. delo no.9:10,-le S 6 . (MIRA 16:10)

1. Rentgenodiagnosticheskiy otdel (rukovoditel' - starchiy nauchnyy sotrudnik A.I.Pozmogov) Kiyevskogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo i onkologicheskogo instituta.
(AORTA—ABNORMALITIES AND DEFORMITIES)

OVOSHCHNIKOV, M.S.; SEMENOVA, A.M.; PASECHNIK, P.I.; BULICH, N.P.; KUNITSA, L.K.

New factors in the methodology of radiotherapy in cancer of the
lungs. Uch. zap, KRROI 7:101-120'61. (MLA 16:8)
(LUNGS—CANCER) (RADIOTHERAPY)

PASECHNIK, P. I., Cand Med Sci -- (diss) "Significance of transverse tomography in x-ray diagnostics of tumors and tumorous formations on the lungs and the mediastinum." Kiev, 1960. 17 pp; (Odessa State Medical Inst im N. I. Pirogov); 300 copies; price not given; (KL, 17-60, 171)

PASECHNIK, P.I., klin.ord.

Experience in using transverse tomography in certain diseases
of organs of the thoracic cavity. Vest. rent. i rad. no.4:66-71
(MLRA 8:12)
J1-Ag '55.

1. Iz rentgenodiagnosticheskogo otdeleniya (nauchnyy rukovoditel'
kandidat meditsinskikh nauk V.A.Arugaszyev) Kiyevskogo rentgeno-
radiologicheskogo i onkologicheskogo instituta (dir.-prof. I.T.
Shevchenko)

(ROENTGENOGRAPHY
tomography, transverse, in dis. of heart & lungs)
(HEART DISEASE, diagnosis
tomography, transverse)
(LUNGS, disease
diag., tomography, transverse)

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CIA-RDP86-00513R001239320006-5

POKROVSKY, G. A.

FEDERAL BUREAU OF INVESTIGATION

U. S. DEPARTMENT OF JUSTICE

BUREAU

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239320006-5"